EUROPEAN PROTECTED SPECIES (EPS)

Far Laithe Barn, Hill House Farm, Grindleton. (NGR: SD 764 465)

Survey date: 27 May 2014

Figure 1: North-east elevation of barn

1 INTRODUCTION

1.1 Location of property

The property is located within the boundary of the Forest of Bowland AONB at Hill House Farm, approximately 0.85km north of Grindleton village. The building is situated on gently rising ground at an elevation of 130 metres overlooking the Ribble Valley to the south-east.

The barn is surrounded by open countryside and is adjacent to extensive sheep pasture (type B3.1 semi-improved basic grassland - Phase 1 habitat category).

There is no woodland or plantation immediately adjacent to the property. The nearest significant woodland is located at Grindleton Forest more than 1km north-west of the property, although there are several broadleaved trees and well-established hedgerow nearby comprising ash, alder and hawthorn and wych elm.

The site is not adjacent to any extensive area of open water or river channel, although a small beck flows close to the barn within 6 metres of the west elevation. The nearest significant river channel within the district is the River Ribble approximately 1km south-east of the site.

A local data search has shown there are no designated nature conservation sites immediately adjacent to the property ie. Special areas of Conservation (SACs), Sites of Special Scientific Interest (SSSI), Biological Heritage Sites (BHS), National Nature Reserves (NNR's), Local Nature Reserves (LNR's) or Regionally Important Geological and Geo-morphological Sites (RIGS).

1.2 Description of property

This is a 4-bay detached stone barn (figure 7) with traditional rubble-infill wall construction and duo-pitched stone slate roof. The timber post-and-truss frame supports a rafter-with-purlin roof. The stone slate roof is unlined and there is considerable damage to the roof particularly along the line of the ridge.

Approx. 15% of the stone slates are absent or displaced (figures 7 to 10). The roof has many gaps and significant ingress of water has caused damage to the timber haylofts inside (figures 6 and 7). Three lofts are present: (1) a small hay loft is situated above the entrance porch, (2) another small loft is located beside the wagon entrance, (3) a larger loft is located on the south-east gable, this forms an under-croft with cubicles beneath (figure 8).

Internally, the building has an earth floor and all areas are compacted, damp and heavily manured. The main wagon entrance (figure 2) is cobbled and the wagon door is absent. On the north-west gable end is an unglazed window; there is a single timber door on the west elevation. The building is cool and very well-ventilated /draughty and there is considerable natural light inside the building (figure 7); there are no enclosed voids or areas without natural light.

Stonework inside and outside the barn is mortar-pointed although lack of maintenance has resulted in many obvious gaps in the stonework. Ventilation holes are also present throughout the building (figure 4).

Figure 2: north-west elevation

Figure 3: north-east elevation

Figure 4: south-east elevation

Figure 5: north-west elevation

Figure 6:

Figure: 7

Figure 8:

Figure 9:

Figure 10:

1.3 Proposed works

It is understood the proposed planning application is for conversion of the existing barn into a camping barn.

1.4 Aims of the survey

The aim of the scoping survey is to assess the potential value of the site for European Protected Species (EPS) and to establish whether bats, barn owls or other protected species have ever been active within any part of the buildings that are likely to be affected by the proposed development.

From the developer's perspective, the primary objective of a survey for protected species is to ensure that any development can proceed without breaking the law.

> *For development proposals requiring planning permission, the presence of bats, and therefore the need for a bat survey, is an important 'material planning consideration'. Adequate surveys are therefore required to establish the presence or absence of bats, to enable a prediction of the likely impact of the proposed development on them and their breeding sites or resting places and if necessary, to design mitigation and compensation*.*
>
> *Bat Surveys, Good Practice Guidelines, BCT, (2007).
>
> *The overall aim of surveying at a proposed development site is to collect robust data to allow an assessment of the potential impacts the proposed development will have on the bat populations present on and around the site. . . The data allow the developer to decide whether to proceed with the proposal as it stands, or whether to modify it. Proposals for appropriate mitigation, compensation and enhancement should be based on the survey data and impacts.**
>
> *page 17 - Bat Surveys, Good Practice Guidelines, 2nd Edition, BCT, (2012)

1.5 Survey methodology

The survey methodology follows the recommended guidelines published by the Bat Conservation Trust - *Bat Surveys: Good Practice Guidelines, 2nd Edition, Hundt, L (2012)),* Natural England *(Survey Objectives, Methods and Standards as outlined in the Bat Mitigation Guidelines, 2004)* and Chapter 3 - Survey and Monitoring Methods, *(Bat Worker's Manual, JNCC, Mitchell-Jones AJ and McLeish, AP, 3rd Edition 2004).*

Non-invasive survey methods were used to assess the use of the property by bats.

The search was made using a high-powered lamp (Clu-lite CB2 - 1,000,000 candle power), close-focussing binoculars (Leica Trinovid), a digital camera (Kodak MD41) and 900mm endoscope (ProVision 300) to view all likely areas of the building for the presence of bats, ie. droppings and urine spots, roost staining, corpses, bat fly larvae and feeding remains such as discarded moth and butterfly wings and other insects fragments typically found in a perching and feeding area.

Evening emergence and flight activity was monitored using ultrasonic bat detectors.

Two types of device were used to interpret / record echolocation calls: (I) Batbox Duet - (heterodyne and frequency division) and (2) Anabat SD2 CF detector with a PDA – (HP iPAQ pocket PC); headphones were used throughout the survey.

The dusk survey began 30 minutes before dusk (sunset was 21.20) and continued for 90 minutes after sunset. The surveyor was positioned to the south-east corner of the building with clear views of the south-east and north-east elevations.

Additionally, a Sony video recorder (using infra-red night-vision) and 4-lamp IR lighting rig was located on the north-west elevation of the building to monitor the open window, north-west gable and south-west elevation.

1.6 Data search (grid square SE 74)

Main data sources:

(1) National Biodiversity Network,
(2) East Lancashire Bat Group,
(3) EED surveys 1998 – 2014,
(4) Multi-Agency Geographical Information Centre (www.magic.gov.uk) Natural England,
(5) Nature on the map (www.natureonthemap.org.uk)

Pre-existing information

No previous surveys have been undertaken at the property.

A local data search was carried to identify any relevant records of bat activity within 2.5 km of the site.

There are no records of roosting bats at this location (local bat records are appended).

2 FIELD SURVEY

2.1 Personnel

The survey was carried out by David Fisher (EED) - an experienced ecological consultant with more than 25 years experience of bat ecology and field survey work and a Natural England licence holder since 1989.

Natural England Licence Registration Number CLS03502 (August 2013):

Class Survey Licence WML CL15 (Volunteer Roost Visitor Level 1)

Class Survey Licence WML CL18 (Bat Survey level 2)

2.2 Timing of the survey

(1) A daylight survey and site inspection was undertaken on 27 May 2014 between 19.30 and 21.00

(2) A dusk emergence survey was carried out on the same evening between 21.00 and 22.50

The weather at the time of the survey was mild, dry and bright (minimum temperature: 13°C; maximum temp. 16°C; cloud: 20%; wind: very light NW breeze; precipitation: nil) providing optimal conditions for a dusk emergence survey.

The survey was carried out during the optimal (core) survey period.

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3 RESULTS

3.1 Field Survey (daylight scoping survey)

A daylight inspection of the building found signs of bat activity within any part of the barn; all internal and external features of the building were inspected for evidence of roosting, perching or feeding bats; no field evidence was found.

There is no evidence of roosting or nesting activity by barn owls *(Tyto alba)*.

There are no records of bat / barn owls at the property.

3.2 Evening emergence survey (bats)

Sunset was 21.20; weather conditions were optimal – ie. mild and dry evening with light wind; twilight was prolonged and there was no moon visible.

The emergence survey began at 21.00 and continued for 90 minutes after sunset.

3.3 Bat activity

A solitary common pipistrelle *(Pipistrellus pipistrellus)* was observed flying inside the building between 21.45 and 21.55; the behaviour was typically that of bat having recently emerged from within the building. No bats were seen entering the barn.

Flight was observed throughout the length of the barn at all levels; repeated flight within a building at dusk is known as 'light sampling' activity and takes place before bats emerge from the barn to feed and forage.

Following emergence from the barn, a common pipistrelle bat was seen entering the barn through the main wagon door at 22.03 and was seen flying around the building for several minutes.

Two bat species were recorded in flight around the barn during the survey:

(1) common pipistrelle *(Pipistrellus pipistrellus)*

(2) soprano pipistrelle *(P. pygmaeus)*

3.4 Barn owl activity

A barn owl flew across an adjacent field to the north of the barn at 22.30.

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4 EVALUATION

4.1 Limitations of the survey - bats

The survey methodology is designed to determine the likely presence of bats within the property and does not necessarily prove absence.

National Biodiversity Network (NBN) and other data sources, whilst indicative of the bat species likely to occur within a 10km-grid square, do not confirm presence or absence of a species or habitat.

Crevice-roosting bat species are able to roost within very narrow gaps, frequently less than 25mm wide; solitary roosting bats are sometimes overlooked during daylight inspections, particularly in situations where bats have gained access within cavity walls, rubble infill walls and beneath roof materials.

Field signs indicating bat activity such as bat droppings or staining on external walls and surfaces are frequently removed by the action of wind and rain, therefore lack of evidence requires careful interpretation.

4.2 Site significance for bats

The overall conservation significance of the barn is **low** in terms of roosting, perching and feeding activity by bats. The building is generally cool, damp and draughty and therefore the barn offers limited potential for most protected species (bats and barn owls).

The barn is semi- dilapidated and there is considerabyle ingress of daylight within the building; absence of slates and roofing makes it highly unlikely that breeding bats will be present. The presence of rubble infill walls and cavities within stonework provides moderate potential for attracting solitary crevice-dwelling species such as common pipistrelles.

The 'light sampling' flight activity observed within the barn is characteristic behaviour of pipistrelle species and is frequently observed in field barns throughout the district. Experience has shown that barns in this condition are likely to support only solitary bats or very low numbers of bats (1 – 3 bats maximum) rather than any significant numbers of bats.

The conservation significance of the building is considered to be relatively low.

With reference to the Bat Mitigation Guidelines *(BMG p39, figure 4)* the presence of 'individual bats of a common species' requires the following mitigation considerations:

(1) Flexibility over provision of bat boxes and access to / within new buildings

(2) No conditions over timing of works or post-development monitoring.

4.3 Potential impacts on bats

There is currently no evidence of roosting, perching or feeding activity by bats within the building. The likely risk of causing significant disturbance to bats during the development is relatively **low*** (see 4.4 below).

4.4 Risk of causing disturbance to roosting bats

Type of bat activity	Species likely to be affected	Risk of disturbance
Day / night roosting / light sampling	Common and soprano pipistrelle	moderate / high
Breeding site (nursery roost)	Common and soprano pipistrelle	none
Feeding and perching by night	Common and soprano pipistrelle Long-eared bat (not recorded)	moderate low
Transitional roost / mating roost	Common and soprano pipistrelle Long-eared bat (not recorded)	low / moderate low
Hibernation by solitary bats	Common and soprano pipistrelle	low / moderate

4.5 Risk categories

Negligible risk: it is highly unlikely any bat species have been present at this site.

Low risk: there is only low risk of disturbance to solitary bats or small numbers of common and widespread bat species.

Low / moderate risk: caution required; activity of common / rarer species is possible, including the presence of occasional / regular night perching and feeding activity or the presence of small numbers of rarer species (but not a maternity or hibernation site).

Moderate risk: caution required; there is moderate risk of disturbance to common bat species; activity may include the presence of regular / significant feeding perches and signs of feeding, a regularly used day / night roost or a maternity site of a common and widespread species or the likely presence of low numbers of rarer species ('rarer' as defined within the local context).

Moderate / high risk: considerable caution is required; this category may include a maternity site of rarer species.

High risk: considerable / extreme caution is required; there is a significant risk of causing disturbance to roosting bats at this site including large numbers of common species, a maternity site of locally rare or rarest UK species or a significant hibernation site for rare or rarest species; this is likely to be a site meeting the SSSI guidelines.

*Table 1: Risk of disturbance to bats (adapted from BMG - scale of main impacts at site level on bat populations, page 37)

5 SUMMARY

Summary and recommendations

The proposed building alterations at this property are **unlikely to cause significant disturbance to bats** or result in the loss of a bat roost or cause injury or death of a European Protected Species – (Bats) or result in any significant impact on a local bat population.

The **scale of impact** of building works at site level on local bat populations is likely to be **relatively low.**

Barn owls are not nesting within the building but are present throughout the district.

Mitigation measures are required at the property (mitigation notes are appended)

Enhancement measures are required: the new development should provide access points for pipistrelle bats under the new roof soffits or fascias (NB. these measures are more attractive to roosting pipistrelles than providing bat boxes on the building).

Additional survey effort (ie. dusk emergence and dawn re-entry and swarming surveys) during the optimal survey period May to August is not required.

It is recommended the proposed works proceed with reasonable caution and vigilance for the 'unexpected' presence of solitary roosting bats particularly when roofing materials are being removed and during repairs to structural walls and internal stonework.

It is recommended the works proceed **without a requirement to obtain a development licence** (EPSL) since the proposed works are unlikely to result in a breach of the Habitats Regulations.

APPENDIX A

Mitigation Guidance notes - BATS

Mitigation refers to the practices adopted to reduce or remove the risk of disturbance, injury or death of a protected species or damage to a roost. The Bat Mitigation Guidelines (Natural England, 2004) define mitigation as "*...measures to protect the bat population from damaging activities and reduce or remove the impact of development*".

ACTION	GUIDANCE / METHOD
1. Further survey effort	NOT REQUIRED.
2. Timing of works	NOT REQUIRED **The optimal times** for re-roofing works are during spring (March and April) and autumn (September, October and November). *(as recommended by Natural England)
3. EPS Licence (EPSL)	NOT REQUIRED.
4. Providing access for roosting bats	SEE Compensatory works- Enhancement measures for bats (Appendix B)
5. Areas at greatest risk of disturbance	Solitary bats are occasionally exposed during building alterations to old barns, areas with greatest risk of exposure are rubble infill walls where mortar pointing is absent and where small crevices exist enabling bats to roost. Crevice-dwelling bats, by definition are capable of hiding in very narrow gaps only 15mm to 25mm wide. If you suspect roosting bats are present, seek advice immediately. Crevice-dwelling species such as common pipistrelles are occasionally found under roof slates or between the slates and timber battens.
6. Accidental exposure of bats	In the unlikely event of bats being exposed or vulnerable to harm, all work in that area must stop immediately. If bats are exposed or likely to be disturbed, stop work immediately and seek further advice. Cover the exposed bats to reduce further risk of harm and seek emergency advice by **contacting David Fisher on 01200 446859 / 07709 225783** or contact Bat Conservation Trust (BCT) helpline: 0845 1300 228.
7. Avoid handling bats	Contractors should avoid handling bats but where there is no alternative, use gloves or a small container to move them to a dark and quiet area, preferably without causing them to fly in daylight.
8. Post-development monitoring	Not required, unless specified by local planning authority.
9. Nesting wild birds	There is a risk of disturbing nesting jackdaws and barn swallows in this building. All birds, their nests and eggs are protected by law and it is an offence (with certain exceptions) to intentionally kill, injure or take any wild bird or to intentionally take, damage or destroy the nest of any wild bird while it is in use or being built. Where exclusion of nesting birds is required you must carry out the appropriate works well before any nesting birds return in spring. The latest date for exclusion is the end of March.

APPENDIX B - Compensatory works

Compensation refers to enhancement measures which are recommended to offset any loss of roost facilities for pipistrelle bats within the new development.

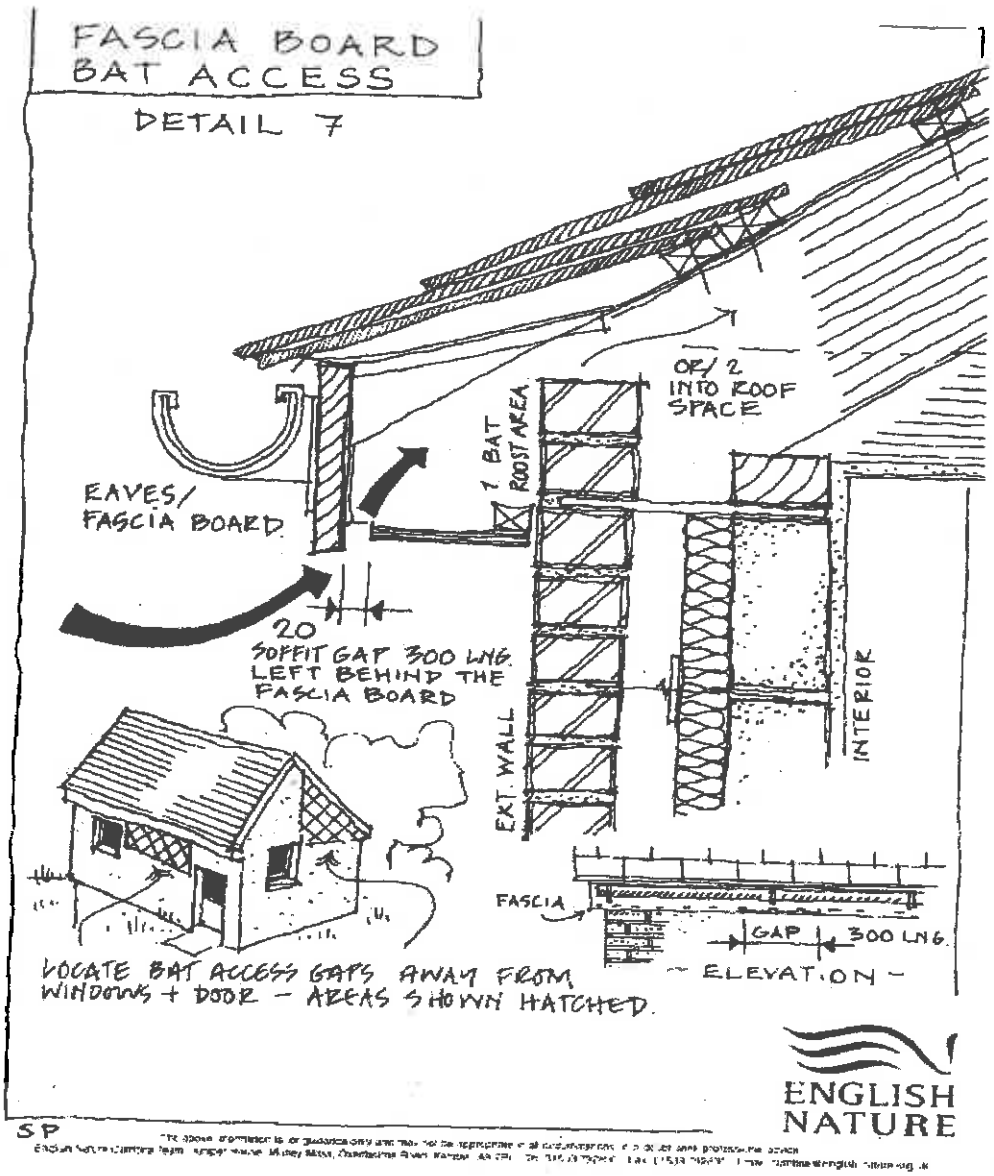
ENHANCEMENT MEASURES FOR BATS

PROVIDE NARROW ACCESS GAPS UNDER FASCIAS AND SOFFITS

Construct narrow access gaps between new fascias / soffits and the upper stonework to enable bats to enter the soffit or gain access to the eaves. Soffits should retain narrow gaps no less than 15mm and no greater than 20mm wide (gaps wider than 20mm are less attractive to bats and may encourage birds to enter).

The gaps are normally created by using spacers / battens on the wall onto which fascias are attached. The most effective location for providing gaps is on warmer south, SE or SW - facing elevations. Expanding foams and mastics should be avoided. Small gaps between stonework and soffits close to the roof apexes are extremely valuable to solitary roosting bats.

RECOMMENDED BY NATURAL ENGLAND: FASCIA BOARD BAT ACCESS Detail 7 - below)



APPENDIX C

Wildlife legislation – Bats and the law

All bat species in the UK receive full protection under the Wildlife and Countryside Act 1981 (amended by the Environment Protection Act 1990). The Countryside and Rights of Way Act 2000 amends the Wildlife and Countryside Act to also make it an offence to intentionally or recklessly damage, destroy or obstruct a place that bats use for shelter or protection. All species of bats are listed on Schedule 5 of the 1981 Act, which makes it an offence to:

- *intentionally kill, injure or take any wild bat.*
- *intentionally or recklessly damage, destroy or obstruct access to any place that a wild bat uses for shelter or protection. This is taken to mean all bat roosts whether bats are present or not.*
- *intentionally or recklessly disturb any wild bat while it is occupying a structure or place which it uses for shelter or protection.*

The protected status afforded to bats means planning authorities may require extra information (in the form of surveys, impact assessments and mitigation proposals) before determining planning applications for sites used by bats. Planning authorities may refuse planning permission solely on grounds of the predicted impact on protected species such as bats. Recent case law has underlined the importance of obtaining survey information prior to the determination of planning consent[1].

"It is essential that the presence or otherwise of protected species, and the extent that they may be affected by a development proposal, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision." [2]

All British bat species are included in Schedule 2 of the Conservation (Natural Habitats, &c.) (Amendment) Regulations 2007, (also known as Habitats Regulations) which defines 'European Protected Species' (EPS).

Protected species (Bats) and the planning process[1]

For development proposals requiring planning permission, the presence of bats, and therefore the need for a bat survey, is an important 'material planning consideration'. Adequate surveys are therefore required to establish the presence or absence of bats, to enable a prediction of the likely impact of the proposed development on them and their breeding sites or resting places and, if necessary, to design mitigation and compensation. Similarly, adequate survey information must accompany an application for a Habitats Regulations licence (also known as a Mitigation Licence) required to ensure that a proposed development is able to proceed lawfully.

The term 'development' [used in these guidelines] includes all activities requiring consent under relevant planning legislation and / or demolition operations requiring building control approval under the Building Act 1984.

Natural England (Formerly English Nature) states that development in relation to bats *"covers a wide range of operations that have the potential to impact negatively on bats and bat populations. Typical examples would be the construction, modification, restoration or conversion of buildings and structures, as well as infrastructure, landfill or mineral extraction projects and demolition operations".*

(Mitchell-Jones, 2004)

Bats, development and Planning in England, (Specialist support series) - Bat Conservation Trust, 5th Floor, Quadrant House, 250 Kennington Lane, London, SE11 5RD, 0845 1300 228

Defra Circular 01/2005 (to accompany PPS 9) - Department for Environment, Food and Rural Affairs. www.defra.gov.uk

Natural England, 1 East Parade, Sheffield, S1 2ET, Enquiry Service: 0845 600 3078 enquiries@naturalengland.org.uk

APPENDIX D - Local bat records - Grindleton and West Bradford area (SD 74)

Species:	*Site:*	*Grid reference:*	*Date*	*Comment/recorder*
Pipistrellus sp.	West Bradford	SD 744444	21.01.11	Maternity roost
Pipistrellus sp.	West Bradford	SD 739447	29.04.06	roost
Pipistrelle sp.	Grindleton	SD759457	21.06.06	Maternity roost
Pipistrelle sp.	West Bradford	SD745445	12.10.99	Grounded bat
Pipistrellus sp.	Waddington	SD735441	01.07.07	Maternity roost
Common pipistrelle	Throstle Bank	SD774447	23.05.11	Maternity roost
Common pipistrelle	Grindleton Primary School	SD763456	18.07.11	Maternity roost
Common pipistrelle	Grindleton Church	SD763456	18.07.11	Solitary roosting bats in porch
Pipistrelle sp.	Riversmead, Bowland School	SD768461	2000	Maternity roost
Common pipistrelle	Riversmead, Bowland School	SD768461	01.11.1998	Feeding and foraging activity
Soprano pipistrelle	Riversmead, Bowland School	SD768461	01.11.1998	Feeding and foraging activity
Common pipistrelle	Riversmead, Bowland School	SD768461	19.09.12	Foraging / feeding
Common pipistrelle	Riversmead, Bowland School	SD768461	17.06.13	Emergence from building
Soprano pipistrelle	Riversmead, Bowland School	SD768461	19.09.12	Foraging / feeding
Soprano pipistrelle	Riversmead, Bowland School	SD768461	17.06.13	Foraging / feeding
Brown long-eared bat	Riversmead, Bowland School	SD768461	19.09.12	
Myotis sp.	Riversmead, Bowland School	SD768461	19.09.12	
Common pipistrelle	Riversmead, Bowland School	SD768461	19.07.13	Emergence from building
Soprano pipistrelle	Riversmead, Bowland School	SD768461	19.07.13	Foraging / feeding
Whiskered bat	Riversmead, Bowland School	SD768461	19.07.13	Emerging from building
Common pipistrelle	Chapel Lane, Grindleton	SD 759458	May 2010	Maternity roost
Myotis sp.	Chapel Lane, Grindleton	SD 759458	May 2010	Maternity roost
Daubenton's bat	Chapel Lane, Grindleton	SD 759458	May 2010	Maternity roost
Brown long-eared bat	Moor Lane, West Bradford	SD739447	2006	Feeding signs
Common pipistrelle	Brocklehurst Farm West Bradford	SD743456	28.08.12	Foraging flight inside barn
Common pipistrelle	Brocklehurst Farm West Bradford	SD743456	26.09.13	Emergence from barn
Common pipistrelle	Brocklehurst Farm West Bradford	SD743456	26.09.13	Foraging and feeding flight
Common pipistrelle	Whittakers Lane ,West Bradford	SD747454	07.07.12	Foraging and feeding flight
Brown long-eared bat	Whittakers Lane, West Bradford	SD747454	07.07.12	Roosting bats
Noctule bat	Whittakers Lane, West Bradford	SD747454	07.07.12	Commuting flight